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About the Institute

The Hunt Institute for Botanical Documentation, a research division of Carnegie Mellon University, specializes in the history of botany and all aspects of plant science and serves the international scientific community through research and documentation. To this end, the Institute acquires and maintains authoritative collections of books, plant images, manuscripts, portraits and data files, and provides publications and other modes of information service. The Institute meets the reference needs of botanists, biologists, historians, conservationists, librarians, bibliographers and the public at large, especially those concerned with any aspect of the North American flora.

Hunt Institute was dedicated in 1961 as the Rachel McMasters Miller Hunt Botanical Library, an international center for bibliographical research and service in the interests of botany and horticulture, as well as a center for the study of all aspects of the history of the plant sciences. By 1971 the Library's activities had so diversified that the name was changed to Hunt Institute for Botanical Documentation. Growth in collections and research projects led to the establishment of four programmatic departments: Archives, Art, Bibliography and the Library.

In car of Sr. Balanço

Wallace

Director

Frank R. Stewart - USAID 25310-8
Deputy Mission Director Ext. 69
Edificio Cruz Azul, Floor 7

In car of Mr Stewart
with his chauffeur

Rosene

Wilson

Popense

Lau

Cowgill

In car of Franklin Stewart (driven by his chauffeur)

Henry A Wallace *and Mr Derecktor*
Franklin Stewart
Milton Lau
Col. Herbert Bolaños (if he decides to come)

Mr Bolaños
Wallace
Derecktor
Stewart
Lau

In second car, to be arranged:

Russell Rosene *— and Mr Derecktor*
Sam Greene (to be picked up at Tecpan)
Dalton Wilson, Agricultural Attache
Wilson Popenoe

Eugene Scheiber

Bag of Stewart
Rosene
Wilson
Popenoe
Lau

[Annotated by Henry A. Wallace]

Garst wrote this to
a great man.
It is an idea.
December 26, 1963

Philip Maguire

- 3 -

December 26, 1963

Now I would suggest demonstrating on 1/40 of an acre -- which is easy to come by because it is about 1,000 square feet -- 33' x 33' -- 11 long steps by 11 long steps.

The fertilizer and insecticide all mixed together would weigh about 12# for 1/40 of an acre. The seed corn would be in a separate package -- 4 oz. The herbicide in another small packet -- 2 oz.

The chemicals and seed for 1/40 of an acre would cost about \$1.00.

It would increase the yield from 12 bushels per acre on the rest of the field to 80 bushels or more on the one spot in the field of 1/40 of an acre.

If the farmer doesn't have the \$1.00, you simply give it to him at planting time -- but get him to give you 1/2 of the increased yield of the 1/40 of the acre over the rest of the field.

We can use counterpart funds to pay the cost of supervising the distributions of the packets -- and comparing the yields at harvest time.

Every one of the countries has hybrid corn available -- either in their own country or in the next country.

The demonstrations should be as numerous as possible -- on from 1/3 to 1/2 of the corn growing farms.

Maybe at the start it should be done with only half of the countries -- or with one-half of the corn growing areas in all of the countries.

At this type of promotion, I have had more experience than anyone. I would like to try it.

One other thing I would like to promote -- the use of a simple mixture of molasses and urea as a high protein supplement for the feeding of cattle. Every one of the countries produce sugar -- and have molasses. They are surfeited with celluloses -- rank growing grasses, for instance. All they need is some urea -- some minerals and Vitamin A -- with very little cost -- and they could double beef production without adding any to cattle numbers.

I have fed more cattle with the bulk of the feed being cellulose -- and all of the purchased protein in the form of urea, than anyone anywhere.

In short, I am highly qualified. I know how to increase corn yields.

Writen by Roswell Garst
of Corn Rapids, Iowa.

C
O
P
Y

over optimistic

17 January 1964

Dear Henry: (Wallace)

I have been down at Tela on the north coast of Honduras for ten days and have just returned to Zamorano for a couple of weeks before going back to Antigua. Your letter of 29 December was awaiting me, and I hasten to say that I don't think the strawberries suffered the awful fate we both feared. A few hours before I left Antigua I got a notice from Sanidad Vegetal that they had a pkg of plants for me, which I knew must be the strawberries; so on my way to the airport I drove down to Jorge's house and found him at home, and told him to get the plants out of hock the next morning and taken them over to Antigua and plant them in our garden which I feel sure he did. Soon as I get back there I will tell how it all worked out.

On getting back here, Bert and George Freytag held a council of war (last afternoon) to see how we are coming on with the Antigua project. When we got through Bert says "I begin to feel enthusiastic about this". Of course I always have felt enthusiastic. But you have been thinking about details - which we did not delve into at Antigua - and the whole thing will take a bit more organizing, and for that reason we are happy that you are coming to the Antigua meeting. We had not heard of this. I had planned to go up to Florida about February 15 but I will now stay in Antigua until you come down, and in the meantime will do some more planning. We begin to realize that we will have to put somebody on the job to keep constant tab on things, to see that not too many elotes are eaten which would cut into final yields, to stand by at harvest time and weigh the crops, and so on. All of which probably means a young Zamorano, and he must be a dedicated one (there are such) who will get right out on the job. Bert and George want me to start things off by selling the idea to my Indian friends and checking up frequently, but I can't handle all the details week after week. Incidentally, one of the checks you sent for this project seems still to be over in Salvador, due probably to Chico's absence, but it and the others can wait until we get things better organized and Chico is back here to take a leading part.

Your memo from Roswell Garst rings a bell, I believe. Isn't he the young chap who spent some months, maybe 10-12 years ago, feeding our cows on Urea, and finally gave up because we had no molasses with which to mix it? I agree that we might get some help from him. Let's keep it in mind.

George Freytag says he has the necessary seed for our project. He is not sure we should complicate the program by adding fertilizer. But we all agree this can be done desirably if the work has enough supervision. Otherwise our Indians will sell the fertilizer to buy a new 14-inch hoe.

I sure look forward to seeing you again - and by the way, that Huehuetenango group of Maryknolls are great and I want to get in touch with them and will do so in Feb. If worst comes to worst they could handle the project for us.

Ever yours,

ESCUELA AGRICOLA PANAMERICANA

APARTADO 93

TEGUCIGALPA, HONDURAS
CENTRO AMERICA

Antigua, Guatemala, 9 February 1964

Dear Henry:

Going back over your letters I note that you are bringing Mr Derektor with you. Fine. I still hope you will, both of you, stay here in our house, for I think it probable Chico will be with us (if he comes) and Bert Muller also. I have urged Bert to bring George Freytag over, but George does not seem very keen about coming this time - says he went to the last meeting and he is thinking of sending one of his assistants to this one. If you feel strongly about having George here (as I do) I suggest you write Bert to that effect.

You are planning to hire a car and head for Huehuetenango immediately on arrival. Unless you have someone lined up - perhaps the Maryknoll boys have someone in mind - I believe we can save about one third the cost of this trip by taking a car I use here in Antigua. It is a good Dodge, and Juanito the driver (and owner) has done a lot of work for me and my friends for the past 15 years. To show the difference in cost, Juanito charges me \$8 to take me to the airport while the boys at the airport charge \$12 to bring me over here from there - the same trip. I think you will most certainly want to break the trip overnight; we won't be able to get away from Guatemala City before noon and I believe it will take us eight hours to reach Huehuetenango, or at least seven. Let me know if you want me to line up Juanito for the trip. As I told you, we could take my Volkswagen but it is really a bit uncomfortable for a party of four on a long drive.

I have just received the program for the Corn Conference from Eugenio Schieber, and I note the last day is to be devoted to a trip which will show us the work being done here by the IAN. I think by all means we should take this trip; don't you? Incidentally, if you really prefer to stay at the Hotel Antigua with most of the crowd, you should let Eugenio know, but I hope you will stay with me. I am certain to have one or two others with me so it won't mean any extra work for Maria.

As to our program, the more I think about it the more I doubt if we can conduct 50 carefully controlled experiments, especially when they are in the hands of Indians, though of course supervised by our man. But not all the Indians are going to do their part. I wish you would be thinking about, say ten controlled experiments, and then distributing lots of 10-lbs or so of our selected corn to 50 Indians or even more; letting them plan it and care for it just as they do their own milpas, and then checking in a general way at harvest time, and before. We will get them interested in this way and can undoubtedly cover a wider range of territory than we can if we try to have our man watch 50 carefully controlled plantings, including fertilizer and insect control. But this is just a thought; when you are here we will work out the right program, which must depend in part on the sort of man we can get to carry it out.

I had a nice letter from Lewis Roberts. Everybody is with us on our program!

Faithfully yours,

ENRIQUE GARCIA SALAS M.

14 AVENIDA 1-45, ZONA 14
TELS. 68-3-56 - 68-9-35
CIUDAD DE GUATEMALA

FINCA "SANTA CLARA"
CIUDAD TECUN UMAN
DEPTO. DE SAN MARCOS

Guatemala, February 13, 1964

Dr. Wilson Popenoe
Antigua

Dear Doctor Popenoe:

I recently received letter from our mutual friend, Doctor I. E. Melhus, telling me that Doctor Wallace, a very prominent scientist and public man, is coming to Guatemala at the end of this month or early March, and that you will be entertaining him. Doctor Melhus asked me to contact you and see if there is anything I can do to help. I would be highly honored meeting Doctor Wallace and certainly delighted to help in any way I can showing him Agriculture in Guatemala, what little I know. Please let me know how I can do that.

It has been a very long time since I have seen you or heard from you, although I often think of you and remember the happy days at Lancetilla, under your able guidance.

Please let me hear from you. With kindest personal regards, I am,

Sincerely yours,

E. Garcia Salas M.
Enrique Garcia Salas M.

EGS:edi
CC: Dr. I. E. Melhus

ESCUELA AGRICOLA PANAMERICANA

APARTADO 93

TEGUCIGALPA, HONDURAS
CENTRO AMERICA

Antigua, Guatemala, 16 February 1964

Dear Enrique: (Henry A Wallace)

Your letter of the 7th, advising of your arrival via Panam instead of Taca, duly received, and I also have a note from Eugenio Schieber to the same effect.

Since writing you last, things are developing pretty fast. In the first place, about the Huehuetenango trip. Ex-Secretaries of Agriculture and Ex-Vice Presidents of the US dont come to Guatemala every week, and it is becoming obvious that quite a few local celebrities are planning to follow the pilot car to Huehuetenango. Fine business. The more the better, say I, because it will get more people interested in better corn for the Indians. As things now stand, You and your compañero Mr Derecktor and my myself will be the nucleus of the trip; Bolaños plans to go along, you say; Mr Stewart has written you that he hopes to go. I dont know about Sam Green's plans but maybe he would like to come. All in all, it looks like two cars to me. In my last letter to you, I mentioned the possibility of my getting a car for us. I dont think that is going to be necessary. So what I propose to do, barring instructions from you to the contrary, is to meet you at the airport without a car, and see how things line up. My only kick is that the trip is going to be too fast. I wish you had planned on getting here one day earlier. As we go thru the highlands on that long trek to Huehuetenango (and dont fool yourself, it is a long trek) we are going to want to get out once in a while and talk to that Injun over there in his cornfield. As things now stand, we will have to forego this.

The major development at this end is based on the enclosed telegram. I went to the Embassy and we had a swell conference. The Ambassador, Dalton Wilson the Agr'l Attaché (a nice chap from Plant City, Florida; he must know a lot about strawberries), Mr Brown of AID and the agronomist of AID whose name I did not get, but he is a very intellogent and I think practical chap from Minnesota who knows his corn. He was the one who brought out most of the ideas. They were somewhat as follows:

The big need is to have more seed available. It appears the govt does not have the cash to carry out a big program of seed production. We do not want hybrid corn; this was fully agreed. And we should not give out synthetics, i.e. seed which the Indian can save and plant year after year, unless we give him fertilkzer along with it. And it did not seem likely that we can give intensive supervision to many experimental plantings. Maybe better just give out seed and fertilizer, to a lot of Indians rather than run a few experiments.

Of course the whole matter was left in abeyance until you come down and the whole thing can be threshed out. I made it clear that we do not want to tread on anybody's toes, or poach on anybody's preserves. We would simply like to hasten a bit the improvement of production among the Indians, who up to now havent been affected very much by the fine programs which are being carried out by the various governments and the Rockefeller Foundation. The Ambassador

ESCUELA AGRICOLA PANAMERICANA

took what seemed to me a splendid stand, and I would cooperate with us in every way, and especially wanting to see that you get into the picture as fully as possible. To that end he suggested a reception for you at the Embassy, and said he was going to get in touch with you about it. He asked me to send in a list of names, people who would be interested in meeting you and interested in the work. This I am doing. I think the reception will be a good thing all around. At the same time, I am trying to keep people from thinking that what you and I have in mind is anything big, anything that will overshadow the work already under way here.

I haven't heard from Chico as yet - probably he is only now getting back on the job and will be very busy. I do not feel sure he will be able to get over here; I think at best he will only come for a day or two. As for Russ Rosene of the American Friends Service Committee, I know him and think you should try to tie him and his group into the program some way or other. At the meeting at the Embassy, we mentioned the Peace Corp boys but no one was prepared to say just how far they might be able to help. Yesterday I talked with Arturo Falla, who has a big finca near here, elevations from 5000 to 7000 feet, and he thought it might be a fine idea to give him a lot of seed and fertilizer, to pass out to his mozos, all of whom have milpas on his land. I believe this might be a fine way to do some good work, not only through Arturo but numerous other finqueros.

As you can see from all the above, there is a lot of interest here. When you come, I am sure we can, all together, work up a very practical program which will do a lot of good. Ed Shook and I made a two day trip thru the highlands early this week, especially the Tecpan region where we found the Indians are waking up. Some are using a native species of *Lathyrus* as a green manure; others are buying a little fertilizer. I don't think many of them have been able to get better seed but we saw some very good corn which I would like you to see; I couldn't find out the origin. They are growing three colors: white (which they prefer), yellow and black. They know more about the matter of varieties and their adaptation to various soils than I had imagined. In fact, I believe they are intellectually prepared to be very receptive.

I sure look forward to your arrival and so do a lot of other fanatics. As I have written you, I don't think you need to worry about accommodations here in Antigua (nor elsewhere). If they drag you to one of the hotels so as to be with the gang, all right, but I can take care of four or five here at the house without inconvenience and give you a little more privacy than at the hotels, where everyone is going to want you to sign your name on an ear of his corn or something like that.

As I wrote in my last, we have 82 strawberry plants growing here in my garden. In view of the poor soil, you must tell me how to push them on with a little of the right kind of fertilizer - and when.

Ever yours,

ESCUELA AGRICOLA PANAMERICANA

APARTADO 93

TEGUCIGALPA, HONDURAS
CENTRO AMERICA

Antigua C., 21 February 1964

Dear Chico: [Francisco de Sola]

This is just about the last chance I shall have to advise you regarding plans in connection with the visit of Mr Wallace and the Corn Conference. I am going into town Monday (today is Friday) to get lined up more definitely with the local folks; I was going in yesterday by it developed that it is the anniversary of the death of Tecum Uman and tomorrow is the anniversary of the birth of George Washington and since the Embassy folks dont work on Saturdays they get Friday off to compensate for the official holiday. So I go in Monday.

Mr Wallace has advised that he and Mr Derecktor will arrive on Pan Am at 10.40 a m, Friday the 28th. Mr Wallace wants to leave at once for Huehuetenango, stopping over night with Sam Greene at Panajachel. He plans to come back here on Monday morning for the first meeting of the Corn Conference. That evening at 7.30 the Ambassador is going a reception for him at the Residence. Then come the three days of the Conference, and on Friday the sixth of March Mr Wallace is booked to take luncheon with the American Society and give them a talk. I think he plans to fly home on the 7th. He has mentioned going back to Salvador with you, if you come over here, but I really dont see how he is going to have time to squeeze this in.

I shall meet him and his compañero at the airport. I may go over to Huehuetenango but I may have to stand by to keep things going at this end. I dont yet know whether or not you are coming over, or when. If you could come and I am way with Mr Wallace on the Huehuetenango trip, your room here at the house will be ready for you. Bert Muller may be here - I hope so - and I believe Mr Wallace and friend will have the guest house. We can handle this set-up very easily, and I think it would be fine for us to be together; but if it seems politic for anyone to stay elsewhere, allright. I can tell you that there is a good deal of interest locally in the visit of Mr Wallace and quite a few people have expressed a desire to be among those present. Dr Melhus has written to some of his old friends here, and Mr Wallace himself has "contacted" as the gringos put it, quite a few.

I have just had a note from Bob Armour, who is considerably worried about the housing situation at Zamorano. I have replied today that it may be possible for you and Bert to get together on this, over here at Antigua next week; and in any case, not to worry, for I feel sure something satisfactory can be worked out. One cannot help getting the impression that Ric is viewing the matter a bit emotionally.

Siempre su muy afmo y SS,

ESCUELA AGRICOLA PANAMERICANA

APARTADO 93

TEGUCIGALPA, HONDURAS
CENTRO AMERICA

21 February, 1964 Antigua, Guatemala.

Dear Henry:

This is perhaps the last chance I shall have to get word to you via airmail, so I will tell you how things now stand at this end. I had planned to go into town yesterday to talk things over with those interested, but three holidays - unknown to me - have killed the last half of this week and I can get nowhere until Monday.

I have no word, as yet, from Chico but hope he is coming over. A visitor here from El Salvador told me, several days ago, that Chico is at home, but I can easily imagine he is very busy. My guess is that he will blow in here about Monday the second of March. That evening at 7.30 the Ambassador is staging a reception for you at his residence. This will be important. He asked me to help line up the right people and I have given him a list of some 15 who may not be on the Embassy list but who are interested in Corn and Injuns.

Until I get into town Monday when the Embassy folks will be on tap I cannot get the Huehuetenango trip fully lined up. I don't know how many will really want to go. In accordance with your letter of the 12th, and with my ideas of protocol, if Mr Stewart wants to drive you to Huehuetenango I think that is the proper procedure. He should, I feel, take with you Milton Lau, the astronomist. I mentioned this lad in my last to you. He is allright. He knows corn and he belongs to Stewart's outfit. Another could go in that car. Let's see how it works out. I would go, I have suggested that I fly over earlier and you have agreed, but the more I think about it the more I feel I must be there when you arrive. Some folks are much interested but are too timid to want to ask you to take them along. If Russ Rosene wants to take his car, several others could go with him - of course he would prefer to have them. How about Bolaños, and Eugenio Schieber? I don't have to go, and it may develop that I had best stay here and try to develop your program along the lines you want. With the Corn Conference right on our heads, lots of things will be coming up. Wellhausen must be remembered and brought into the picture any way he wishes. So just keep me in mind as the fixer, behind the scenes, who will meet you and do his best to see that things are arranged to the best interests of all. That's what I am here for. But I do think you want Milton Lau with you as much as possible. He knows his onions - I mean his Zeas. And incidentally, I believe Milton has something, when it comes to this matter of sintéticos and/or compuestos. Everybody I talk to here says "Oh, I am so glad to hear Mr Wallace is going to give the Indians that wonderful hybrid corn!". The public, but not the técnicos and us simple farmers, are carried away by the hybrid business. Sort of white man's magic, you know. Of course I don't mean white man's, I just mean Modern Science. In the same category as Atomic Energy. Or that new cure for Cancer.

Now another matter. That luncheon with the American Society. The Ambassador is for it. I got a long telegram from Bob Corrigan, Secy. of Embassy, and a good friend of mine, and so I called him on the phone - "which isn't a simple matter, here in Antigua." Not like your dialing Honolulu from New Salem. I told him that I felt you simply must go in for this. It is good for the United States, it is good for Guatemala, and it is good for the Corn Project. And I told him the only date I could be sure of would be the day after the Corn Conference is over. This would be on Friday. The engagement means you will have to be away from Antigua from about 11 a.m. to 5 p.m., and I didn't think you would want to cut into the meetings here to that extent. We've got to remember that Ed Wellhausen (and George Herrer) and several others are going to be awfully anxious to have you take an active part in these meetings. You can't get away from the fact that you are not only an ex Vice-President of the U.S. but the daddy of the hybrid corn business.

In your last letter you mention Enrique Garcia Salas. One of my boys. I trained him at Lancetilla back in the last 1920s. He was minister of Agriculture here in the early days of Ydioras Fuentes. He has just written me, saying Dr Melhus has written him, and he wants to meet you. He is absolutely allright. I have asked that he be invited to the reception and have suggested that he come to the airport to welcome you, if he has time. He is a big operator, in the hybrid corn and not the Injun field, but he is a good citizen and we want - and easily will have - his moral support. Oh, there is no end to the moral support we are going to get. And I think Milton Lau is right in saying the big thing is to produce more seed for the Injuns. You and I both know that major interest has centered in hybrid corn. Melhus developed his Tiquisate Yellow which has become important; but I don't suppose 1% of our Indian clients have ever seen or heard of it, and it is not for all elevations either. The more I think about it, the more I feel that when we can go with out little project is to develop in larger quantities seed of good "sinteticos" for the various climatic conditions (altitude mainly) and get them out to that Indian up there on the steep hillside where if he isn't careful while he is hilling up his corn with that 14-inch hoe from Hartford, Connecticut, he will fall off and break a leg.

Siempre su muy afmo. y SS

Antigua G, 23 Feb 1964

Dear Henry:

Your letter of the 18th arrived last night, and the Good Lord, in His Infinite Wisdom and Mercy, brought Franklin Stewart to my door half an hour ago. Hombre, that guy is alright. I told him that I was coming into town tomorrow and we would talk things over. We talked them over here, but there is a little more talking to do tomorrow, after which I will add a P S to this letter and put it in the mail box at the airport so it will get off promptly.

I think things are shaping up very well. It is obvious that we cannot get tied up too closely with Sammy Greene. He does not live in the village of Panajachel, where there are hotel accommodations. He could not take care of the number of people we are going to have in the party. And furthermore, nobody I have talked to seems to think he is a very important factor in the local picture.

The way Stewart and I figured it out is something like this: he will take his car, a good one, and you and Milton Lau and Bolaños will go with him - if this works out. Stewart feels as I do that Lau is going to be our key man in the official set-up, as a collaborator in our program. Stewart thinks Russell Rosene will handle the second car - says if Rosene cannot supply a car the AID will. In that car we are talking about having in addition to Rosene, Dalton Wilson the Agr'l Attache who we think as a matter of protocol, should be invited to do; and your friend Mr Derecktor if he wants to go to Huehuetenango as I imagine he will. If there was an interesting horse farm around Guatemala he might prefer to go to see it, but I do not know of any. I will check on this. I will go along in this car if there is room, but as I think I have written you, I do not really need to go on this trip as I can go later.

I will also get lined up with Bob Corrigan about your talk to the American Society. I have written Bert Muller that there is no need for George Freytag to come; when we were over there he said he did not care to come, you know. I do hope Bert Muller will come and I agree with you that he should be included in our talks. I did not know just where we are going to get enough seed corn for our project this year, and I believe Milton Lau is doubtful that we can do so. All this will have to be threshed out when we get together. Maybe Wellhausen has the answer.

I will append a note after I have been in touch with folks in the City and have definite commitments from those concerned. You are going to have a full schedule, but leaving out the big detour to go through Panajachel and see Sammy Greene I think we can make out very well.

Siempre su afmo y SS,

ESCUELA AGRICOLA PANAMERICANA

Antigua C., 25 January 1965

APARTADO 93

TEGUCIGALPA, HONDURAS
CENTRO AMERICA

Honorable Henry A. Wallace
South Salem, New York.

Dear Enrique:

A few days ago Milton Lau, Ing. Castillo and myself put our heads together. Based upon this and your letter of the 15th, I will tell you about where we stand. As regards a budget for this year's work, Milton and I will prepare one just as soon as we can things lined up a bit more definitely. According to our figures, the Wallace Corn Program has to its credit, at Escuela Agrícola Panamericana, \$6000 less about \$60 which is all that has been drawn against the project to date. But we will check up on all this with the accountant at EAP before we really get into this season's program.

Here is the situation. We believe as you do that it is not worth while to distribute seed to the Indians without fertilizer. Now, we have a lot more seed on hand, and it is fine seed (Castillo says four synthetics) than we have money to buy fertilizer. I have written to Chico de Sola, asking if he wants to contribute some more fertilizer this year. If not, we will have to base our distribution to the Indians on what we have to spend in connection with the seed, and with fertilizer, and I suppose Aldrin- which latter should not be a big factor.

Castillo says the varieties we have available (I saw a lot of the seed at Quezaltenango a week ago) should be used almost wholly at elevations between 7000 and 8000 feet. This leaves Huehuetangango out of this year's picture unless we give some seed to the Maryknoll boys to put north of that town, at higher elevations (Huehuetangango is only a little above 6000 ft).

ESCUELA AGRICOLA PANAMERICANA

Now here is the next point. We will simply have to get a man to

APARTADO distribute the seed among the Indians, which is the part of REGIONAL - HONDURAS
CENTRO AMERICA in which I personally am most interested. (We will in any case have much more seed than we can distribute, with fertilizer, and as I have written you, the idea now is to let the government have the surplus to distribute through the agricultural cooperatives in the Quezaltenango region, on some sort of a basis which will provide fertilizer, which the recipient will pay for out of this crop). Milton and I were up against it, on this matter of hiring a man, but to our great satisfaction Castillo thinks the government will lend Marcial Barrios for the necessary time - two or three months- if we pay him something in addition to his government salary, which is fair enough. We will have to begin distribution among the Indians about a month from now, and probably continue it thru April. Or more probably, begin in early February.

Now, how fast can Marcial get around among the Indians with his little bags of seed and that indispensable little bag of Fertilizer? If we can serve a large number of Indians, we cannot hope to have Marcial lay out plots, supervise planting, and end up with obtaining accurate records and all that sort of thing. As I see it, we can do the most good by distributing a lot of material, on the basis of one cuerda, about one-tenth of an acre, among a lot of Indians and let Nature take its course. BUT, including perhaps 20 plots scattered over a wide area - Quezaltenango, Quiché, Chichicastenango, Tecpan - all between 7000 and 8000 feet, on which we can get some fairly definite figures. I believe this sort of program is the best we can have, with the man-power available.

Both Milton and myself are very happy about the amount of seed, and the kind of seed, which has been produced for this year's planting.

We think progress to date is rather better than we had dared expect.

ESCUELA AGRICOLA PANAMERICANA

Now the problem is to see that enough fertilizer is used. In a trip to the highlands a week ago, I saw in the patios of APARTADO 293 Indian farmers recently-harvested corn which looked pretty darn good. We have got to convince these lads, and they are pretty smart farmers, that they are going to get greatly better yields with the Wallace program. Don't you agree? The government is putting a lot of emphasis this year on fertilizing wheat. The people are going in for it. But corn is a much more vital crop, in the general economy of the country, than wheat - or at least Milton and I think so. In the long run, at least. And I doubt that we can change the policy of the government, in this respect - at least not right away. I believe we can ultimately get results through the small farmers.

I have not heard from Bert Muller regarding the sort of program Freytag can carry out in that region. Bert has recently come back from vacation and I will get in touch with him. I do feel, however, that the Escuela is not likely, right away, to work among the small farmers the way we are hoping to do here in Guatemala. I do not believe that the present policy of the Escuela is yet aimed at this sort of thing. Of course it should be, and I hope will be eventually. Chico de Sola could help us along this line.

You will be hearing from us again in the very near future.

Faithfully yours,

Wilson Popenoe

cc Dr Milton Lau

Antigua, Guatemala, 17 August 1965

Hon Henry A Wallace
Farvie Farm
Soth Salem, N Y

Dear Enrique:

Your letter of the 3rd was a little slow in reaching here, tho perhaps it seems so because I was away for several days on that corn survey in the highlands. I have transcribed this letter to Bert Muller, with copy to Chico de Sola, both of whom will, I am sure, be pleased to see that you are in favor of putting more effort on George Freytag's work.

As to just what we can do in Guatemala next year, I think I will wait to discuss this with Milton Lau and then we will tell you what we think about it. I dont expect Milton back until, about the middle of September.

I cant see why the Maryknoll boys were not included in this year's program. There was no end of seed available, - and incidentally, there will be a lot next year, without doubt. Maybe we can find some way to get closer to our Indians; if so, I would be in favor of going ahead. I have an idea that the sort of program the Ministerio is carrying on this year will continue next year and I would be in favor of giving them some help if necessary. You got them interested in commercializing the highland corns, and pushing fertilizer; let's try to see that it is continued, and maybe seeps down to the little fellers faster.

Ever yours

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Ever yours

Antigua, Guatemala, 17 August 1965

Dr Albert S Muller, Director,
Estuella Agrícola Panamericana
Tegucigalpa, Honduras.

Dear Bert:

Under date of 3rd August, Mr Wallace has written as follows:

"Since the School is in a position under Muller and Freytag to carry on a continuing program for the uplands with corn, I am very much in favor of doing what you suggest in yours of July 28. Beginning in 1966, I am quite ~~wikking~~ sure Wallace Genetic will be in position to send a check to the school each year of \$2000 or \$2500. All that will be needed will be for you to write me."

"I will leave it to you to make your peace with Lau, Castillo and Sandoval."

"As I have said many times, I have great faith in Freytag. I think he understands corn. He can feed his best material to Castillo for trial in Guatemala, whenever he deems it wise."

"Consider page 4 approved so far as I am concerned. Of course the objective is still to help the Guatemalan Indians in Tierra Fria".

I am sure you have a copy of the letter we wrote Mr Wallace, terminating with a budget, so you will know what he means when he says you can consider page 4 as approved. Undoubtedly you will want to go right ahead with the program as outlined, and you have plenty of cash in hand with which to work.

I am sending a copy of this letter to Don Chico so that he can write you if he has any comments or suggestions.

Sincerely,

Wilson Popenoe

cc Don Francisco de Sola

Antigua, Guatemala, 17 August 1965

Hon. Henry A Wallace
South Salem, New York.

Dear Enrique:

Having just returned from three days in the Highlands, I will try to give you a brief report on our corn program.

Nearly all of the work has been centered around Quezaltenango. No seed nor fertilizer was sent up to the Maryknoll boys, as I believe you know. A fine lad up in the hills between here and Guatemalan City, Paul Mackay who works under the American Friends Service Committee, received material at my request and reports that he has about 18 plots and they are doing beautifully. I have not seen them but this lad is enthusiastic and dedicated, and I'll bet he is doing a job. The fine young Jayhawker of the Peace Corps, Grueber, who was at Patzún and had one of the large seed plots last year, has gone home and I believe there is not much in his zone. As I have said, mostly the general area of Quezaltenango.

Manlio Castillo was in Quezaltenango, but turned me over to Urbano Martínez, who headquarters up at the Indian school which you will recall we visited - at Chiantla, near Huehuetenango. I had not previously met Martínez but he impressed me quite favorably.

I was able to see only a few plots, and did not feel it necessary to visit more because the situation is this: as far as I could learn they did not out among the Indians on the hillsides, to any extent at least, but placed the seed in the hands of small farmers, many of them Indians of course, but not the little fellows with the big hoe. And when I asked to see the check plots, Urbano told me there really weren't any, laid out like experiments. The men who got the seed and fertilizer knew what to expect, and instead of keeping check plots with ordinary seed and fertilizer left out, they went ahead and bought fertilizer and gave everything the works. They wanted all they could get out of their land (naturally enough) and weren't interested in any experiments. Better seed and some fertilizer, and all they could get of it. Urbano explained that we could get a good comparison by looking at some of the neighbors plantings, people who didn't have improved seed and some fertilizer. But you know that isn't the way to run experiments.

There is another feature which isn't quite what you planned. It was my understanding that the Indians were to be given the seed and fertilizer, as a demonstration. They are operating on this basis: on harvesting his crop, the farmer is to pay the government seven cents a pound for the seed which was supplied, and pay for the fertilizer also. I mentioned that the fertilizer had been given by Fertica for demonstration purposes, but Urbano explained that if the government gave it to the farmer's it would be setting a precedent. Next year every Juan, Jose and Jorge would be saying "me too" and that would put the government on the spot.

Urbano pointed out another thing: He says the synthetics they have distributed are pretty much unknown quantities as yet, and the Indians are not satisfied in some instances and some places. He says an Indian bites a kernel and says "that won't make good tortillas", or he doesn't like the color, or something else. Those Indians sure aren't dumb. The sometimes, as I used to find in the banana business, they know what's what, but explain it in the wrong terms. One fellow said "Oh, you bet I am in favor of fertilizer. Our land won't produce anything without it; but we have to keep on using it, because the seed gets accustomed to it, and won't grow without it."

As to the money the government is going to take in, from sale of the seed and the fertilizer, I asked Urbano if we had a right to keep the fertilizer money since the material was donated, and he replied that the money would be put back into the Wallace program, sort of a rotating fund. I am not very clear about all this, but as I size things up, what you have done is to encourage the Ministerio boys to devote more attention to highland corn, on a commercial scale. I believe previously they were devoting most of their time to breeding, with not much interest in increasing production on a wide basis. The probably justify this by saying they weren't yet sure that they had the right sort of material - just like the Indian who bit the kernel and found it wouldn't make good tortillas. And they have used very little Wallace Genetic cash. I do not know just how much Castillo and Sandoval have spent, out of the \$2000 they were given, but we will find out shortly. I don't think it is very much, because they have been working on such a different basis from the one we planned.

While I feel that we are not accomplishing, this year, just what we hoped to accomplish - much work among the little Indians with the big hoe - I do believe that, under the circumstances, a great deal is being accomplished. More in connection with the value of fertilizers than in connection with improved seed. The Indians are walking up to the value of fertilizers, and waking up fast.

Ever faithfully yours,

Wilson
Wilson Popenoe

cc Don Francisco de Sola

Tentative Program for 1965-66

WALLACE GENETIC FUND - EAP

Antecedents.

Since its inception in 1964 the Wallace Genetic Fund - EAP program, based in Zamorano, directed by Albert S. Muller and carried out by George Freytag has involved collection and testing and improvement through hybridization and selection of the following types of corn: (In order of importance to the program.)

1. High altitude flints - 5,000 to 7,000 feet.
2. Medium altitude semi-flints or dents.
3. Medium altitude sweets.

The principal corns tested have been those presently available from Guatemalan programs and from the Rockefeller Mexican program; others utilized have been the standard varieties already in use at EAP and various criollo varieties from Honduras. These corns have been planted at Mt. Uyuca station (6,000 feet) and at Zamorano 2,800ft (under irrigation). Disease and morphological notes have been obtained. Crosses have been made among the most promising types and preliminary results under irrigation have been obtained. The original promising types as well as the crosses are presently being grown at Mt. Uyuca and at Zamorano.

Corns which have shown particular promise are: Guatemalan (Gouche, Comp. Sn Marceno), Mexican (Pepetillo), Honduran (Criollo Mt. Uyuca, Am. Mazorca), and standard varieties (Diacol H-205, V-52B-C, Guat. Mejorada). Best sweets are: Pajimaca (including Georgia low ear selection) and the cross La.X Cuz.X Pajimaca. These show particular value when crossed with Gouche or Criollo Mt. Uyuca.

The Wallace-Popenoe High-altitude Program in the Republic of Guatemala has increased the better synthetics and composites locally available as well as a stock of Gouche corn. This has been accomplished during 1964 reportedly having available some 130 quintales of seed. This seed was to be distributed among some 88 Indian farmers with appropriate amounts of fertilizer to obtain comparative data on the value to these farmers of the use of improved seed with fertilizer.

Orientation.

As concerns the two programs, namely the Guatemalan and the EAP-Honduran, it is felt that an increased effort should be made in Guatemala to disseminate the available seed plus fertilizer and that in Honduras the testing and breeding should be maintained at approximately the same intensity as before and that an additional effort could be made to distribute Gouche as well as selections of Criollo Mt. Uyuca among the mountainous areas and their small-plot, hillside farmers (corresponding to the Indian farmers of Guatemala). Although the farmer in Honduras is not truly a high-altitude indigenous type, he is the closest approximation available and placing in his hands the available materials would provide a possible insight into the problems and techniques of possible use to the Guatemalan program as well as obtaining a high probability of useful scientific data and valuable agricultural stimulus to the area around the EAP.

Procedure.

1. Improvement and testing. Single 10 meter rows are planted out of the best Guatemalan, Mexican, Honduran, and other materials as well as the F_1 's, F_2 's, and backcrosses. Plantings are made simultaneously at Mt. Oyuca and Zamorano, complete material being planted on Mt. Oyuca and only checking material in Zamorano. Reserve of all is kept in the Zamorano Genetic Bank. On completion of analysis of F_2 and backcross material the decision will be made as to whether we should work towards synthetics, improved varieties or on a mass selection basis. Hybrids are not to be considered. Additional material for testing will be included as received.

The two best materials in each category will be increased in small isolated plots each year. This material will be available for further testing or for distribution in small plots for testing in the hands of the farmer.

2. Distribution. Since this program is to be directed towards the small plot farmer, who perhaps is not even a landowner, costs will be kept to a minimum principally by the manner in which the program will be carried out.
Step by step:
 - a. Seed will be increased by mass selection. Selected, dried, and treated.
 - b. Seed and fertilizer will be bagged by our students in polyethelene-kraft bags in units for a half manzana for fertilizer and 1/4 manzana for seed.
 - c. Utilization of Peace Corps, Mission groups, Government Extension agents, and others, will be made to locate the right type of farmer in each of four zones.
 - Zone 1. Montañita (between Tegucigalpa and Zamorano)- 25 farmers.
 - Zone 2. Guinope road (south of Zamorano)- 30 farmers.
 - Zone 3. Yuscarán road (south-east of Zamorano)- 25 farmers.
 - Zone 4. Danlf road (east of Zamorano)- 30 farmers.
 - d. A trip will be made in March or April to talk personally with each prospective farmer, at which time his bag of corn and fertilizer will be given him in presence of the person who has made the contact.
 - e. Instructions will be given to each farmer on how to plant and use fertilizer. viz:

The farmer is to plant improved seed up and down hillsides within or adjoining his own corn at same time and with his own techniques.

The farmer is to apply fertilizer when the corn germinates and is less than 8 inches (at approximately same time of first hoeing??) half fertilizer (in separate bag) on his own variety and half fertilizer (in another bag) on the

improved seed. Rate to be used-- 1 table-
spoon per hill= 18 grams per plant of
12-24-12 = from 20-40-20 to 40-80-40 kilograms
of active ingredient per hectare, depending on
plant density.

A questionnaire will be given to the interested or
farmer to be filled out from time to time, and
will be later collected or exchanged for others
to obtain data through season.

Our agent and the farmer will be requested to
remain in contact with each other and with the
school to inform us regarding any unusual
developments. This is an important personal
relations job!

f. A trip will be made in July or August to inspect fields
and take disease notes as well as make other
observations, maintain friendly relations in
expectation of cooperation during harvest.

g. A trip will be made to obtain harvest data (the exact
date will be calculated on the basis of previous
visits and prospective harvest). This trip should
be while corn has relatively high humidity and is
in no danger of being harvested by the farmer
himself! All grain will be left with farmer with
exception of 100-gram samples for determination
of moisture.

Note: An important part of the probable acceptance and continued
cooperation from the farmer will depend on coming to an
understanding with him as to the basis on which the corn
and fertilizer is to be given him. His assumed attitude
is "My grandfather never used it, my father never used it,
so I don't want it." Our assumed attitude, "This is some-
thing that has worked pretty well for the big farmers and
we believe it'll work for you folk on the hill-side as
well."

h. A complete report should be compiled on the basis of
questionnaires, notes, and observations made on
the results, at completion of the harvest period.
At completion, plans for modification or
termination of the program can be made.

Materials.

1. Improvement and testing.	Approximate costs.
Supplies, bags, sacks, tags, etc.	\$ 100
Fertilizer	50
Land preparation	50
Transportation	100
Labor (field hands)	100
Misc.	100
total	<u>500</u>
Special - Stands and plastic bags for storage in Genetic Bank	250
Improvement and testing -- sub-total	\$ 750

2. Distribution.	
Supplies, bags, sacks, tags, etc.	\$ 150
Fertilizer (55 manzanas)(21,000 kgs.) donation	1,100
Land preparation seed increase	100
Transportation	250
Misc.	50
total	<u>550</u>
Special - Assistant for 6 months to make contacts, distribute material, take notes and generally do physical labor involved in the distribution program. Could also help make crosses and trips to Uyuca for improvement program.	\$1500
Distribution program ----- sub-total	\$2050
1965-66 Grand Total	<u><u>\$2800</u></u>

the wealthy uppercrust who send their money to Switzerland had a mind to produce food crops for native consumption instead of so much sugar, coffee, tobacco, bananas or cocoa for export. They want to balance their budget, pay their army, educate their children in Europe or the U.S.A. and buy cars, refrigerators, TV sets and the like from the western world. They feel at home with U.S.A. business men and vice versa.

All goes along as before provided the market for sugar, coffee, tobacco, etc. holds. After World War I, sugar prices took a terrible tumble. Many Latin American countries defaulted on their bonds. Governments were overthrown. Tropic misery was the prelude to western Europe and U.S.A. misery.

After World War I, the population explosion was a minor item. Since World War II, the population explosion has been a dominant factor largely because of DDT and the elimination of malaria from many tropic areas.

With shaky markets for exportable tropic products and with population increasing at a far faster rate than ever before in history, we suddenly discover that jobs and food for rapidly expanding people in the tropic lands is the number one problem in the whole world. The U.S.A., Canada, Australia, New Zealand and western Europe will have more than they can handle in another 10 years. For a time they can feed the hungry after a fashion. But not for long.

Hungry, jobless people will be boiling up all over the world. At fever heat, they are a breeding place for the germs of hatred, fanaticism and violence. These germs are being broadcast by the hate mongers wherever people are hungry and jobless. And remember that the hate mongers are not all Communists by any manner of means. Of course, Communists naturally make the most of what they find ready at hand. It is our job to show our good neighbors to the south how to end the galloping trend toward mass hunger, especially in those countries where the population is doubling every 20 years.

At this moment I think of the splendid job being done among the farm people in so many tropic lands by the Rockefeller Foundation. I mention the Rockefeller Foundation because it started its agricultural work before the other Foundations and because I was in on it from its very first inception in January of 1941 when Raymond Fosdick, President of the Foundation, first came to see me. He knew I had been in Mexico as President Roosevelt's representative at the inauguration of President Camacho the month before. Because of the war the Rockefeller Foundation was stopping much of its public health work in Europe, and Dr. Fosdick wondered about transferring that work to Mexico.

I came to life at once and told him that Mexico's corn yield for 30 years had been static at 10 bushels to the acre, that Mexicans lived largely on corn, that I had investigated their corn in many areas and that I thought increasing the yield of corn per acre was more important than helping the population to increase faster. I have to hand it to Dr. Fosdick and the Rockefeller Foundation. They snapped into action at once and sent three of our best agricultural scientists down to Mexico to make a report.

I still have a copy of that report which Doctor Fosdick mailed to me. Out of that report 23 years ago came the work which has done so much to increase food production in Mexico faster than population. This is the outstanding example in all the tropic areas of the world of how food production can expand faster than people.

Last year Mexico actually exported wheat for the first time. An Iowa boy, working on wheat for the Foundation, has done a magnificent job of developing wheat to fit the Mexican uplands. So it goes also with potatoes where special blight resistant strains have been worked out. And now the same type of work has been carried to Colombia and Chile and more recently to India.

Last spring when I was in Guatemala I studied corn growing among the Indians in what is called the Tierra Fria, the cold country where far more people suffer from cold than from heat. It is quite possible that corn originated in this

area where men using hand labor put in from 200 to 400 hours on an acre. On an acre they put in at least 50 times as much man labor as we in Iowa. It takes them 300 to 500 times as much labor to produce a bushel.

Investigating, I found the Mary Knoll Fathers at Heu-huetenango were doing some corn work teaching a few Indians in their neighborhood by yield test demonstration the advantages of good seed, fertilizer and insecticides. Therefore I arranged personally with the Guatemalan government through their upland corn breeder, a graduate at Iowa State at Ames, the head of their Indian Service and a U.S.A.I.D. Minnesota farm boy with corn background to put on corn demonstration plots in the high country among the Indians.

We used to do that kind of thing in Iowa a third of a century ago. I do not expect the Indians of Guatemala to take hold as fast of new corn ideas as the farmers of Iowa back in 1931 and 1932 for the reason that most of them do not read and write.

Corn has done a lot for me and I felt I owed a debt of gratitude to the descendants of the original corn farmers of the world. So I arranged for money to be sent through an agricultural school in Honduras. Improved seed, fertilizer and Aldrin were made available to cooperating Indian farmers. It is a small beginning but perhaps as big as our first efforts to produce hybrid corn commercially back in 1926. I hope it catches on.

Bob Garst, cooperating with the State Department, has tackled this same problem in his own uniquely vigorous way this past spring in Central America and northern South America.

One thing which has impressed me is how completely a low land corn gets into trouble when it is taken to the heights and vice versa. I grow Guatemalan corn from 7,000 feet altitude on my farm at South Salem, New York, and it does not tassel until late September. It is not only a question of day length and temperature. I obtained from Dr. Wellhausen of the Rockefeller Foundation a few kernels of

a hybrid which yielded 125 bushels to the acre at 7,000 feet. A friend planted them in El Salvador at 2,000 feet and the plants produced very little either in the way of pollen or ears. I saw the plants. They were very unhappy.

The cause is partly a different set of insects and diseases. Hot, wet weather seems to encourage insects and they spread disease, especially the tiny leaf hoppers. The stunt disease which is coming into our southern states, the Ohio Valley and southern Illinois will probably not seriously affect the northern corn belt. At any rate, in Central America where they have been aware of the disease for 20 years, the trouble seems to come largely from the coastal and coastal plain area. In the highlands, the air borne diseases are more common. It has been found by test that the Cuban corns are usually more resistant to stunt disease or "achaparramiento", as they call it in Spanish, than the Mexican and Central American corns which have in them so much highland blood.

The seed corn company which I founded in 1926 has grown some of our best inbred single cross corns in the southern U.S.A. to see if we had northern corns which had in them the built-in resistance to the "stunt" virus. Fortunately a few of them are very good. This makes us happy because we knew it would take some years to transfer the needed factor from resistant Cuban corn to corn belt corn.

In the tropics, helminthosporium or blight which is spread by air rather than by insects seems to cause more damage in the heights than in the lowlands. A very good corn along the coast seems to fail completely on the high table lands.

I mention all this to indicate how dangerous it is to bring in corn from outside. Altitude counts as well as temperature and day length. As I study the carefully conducted yield test records conducted by the Rockefeller Foundation in Central America over the past 6 years, I realize that climatically there are many differences. The corn which comes out on top when planted in May in the tropics will not usually be the best corn when planted in October and this is not only because the days are somewhat shorter in the winter.

The point I am trying to make is that the beginning of wisdom in approaching the oncoming problem of great hunger, low agricultural productivity and lack of jobs in Latin America is to realize that climate, altitude, temperature, geography and history must all be understood. History demonstrates that in most Latin American countries a rather small number of wealthy landowners control the military. For generations, these wealthy land owners have led a most charming way of life. If their way of life is threatened by land expropriation, there is a military take-over, a "golpe" as they call it in Latin America.

But more and more of the well-to-do, highly educated Latin Americans are realizing their duty to the illiterate campesinos and peons. Last July in Antigua in Guatemala was held a meeting of enlightened businessmen from all the countries of Central America. Geographically, Central America, the Dominican Republic and Cuba are, with the exception of Mexico, closest to the U.S.A.

We lost Cuba in 1959 not only because of Castro but also because we failed to understand the needs of the farmer in the back country of Cuba from 1920 onward. And now that population pressure outpaces production expansion in most Latin American countries, we are in danger of seeing the day when the landowners and the military can no longer sit on the lid. Revolutions so often destroy far more than they build. Those who believe in hate and violence can never build permanently but they can cause a world war.

The common man is on the march but it is up to the uncommon men of education and insight to lead that march constructively. The century of the common man can be a century of bloodshed and confusion— Viet Nam multiplied one hundred fold.

The Alianza program proposed by President Kennedy cannot suddenly change the lop-sided land ownership pattern in Latin America. If that were done suddenly as in Cuba, agricultural production would be cut as suddenly and disastrously as sugar production has fallen in Cuba since 1957. Just as it takes many different kinds of corn to fit the

different areas of Latin America so also must the Alianza program vary from spot to spot. The military-landowner junta program may not change suddenly in all countries. But I am one who believes that even power-hungry generals and grasping landlords can be educated to the signs of the times. Destiny is knocking at the door of all the Americas. To open that door with safety will require abundant Latin American capital and willingness to spread education with regard to the use of modern technologies.

Demagogues and hot-headed students will preach revolution while generals and large landowners will use repression. Meanwhile population expands and the prospect of hunger increases. The Alianza funds by themselves are not enough to do the job but I have seen at first hand how they have been helpful. To do a real job, the generals, the big landowners, bankers, and businessmen must lead the illiterate multitudes on the land. If they fail during the next 20 years, the results to the U.S.A. will be more serious by far than the loss of Viet Nam.

With fertilizer, modern insecticides, machinery and adapted varieties the potentialities of the tropics are enormous. The people there can move far faster than our forefathers moved after the American Revolution. Because of geography and history, we have a bigger responsibility to Latin America than any other part of the world.

When I say responsibility to Latin America, I mean also responsibility to ourselves. Of course, the Latin American countries must also realize their responsibility to us. Our capital will not flow if it is certain to be expropriated. Eventually Latin America may be the determining factor with regard to the survival of democracy.

All citizens of the U.S.A. must sooner or later understand this. In this technologically shrinking world, there are hundreds of millions of illiterate people with a per capita income of less than \$150 a year. Tens of millions are found in Latin America. Driven off the land by population pressure, they rush to the outskirts of large cities, there to live in tin can shacks as they vainly search for jobs. They are

ripe for picking by the "hate and violence" boys, the Castroites, the Russian-trained Communists, and above all the Chinese Communists. They are told their sad plight is due to colonial exploitation by the U.S.A.

Half the people in Latin America today are under 18. These young people are idealistic and anxious to suffer for a cause. May God in all his knowing wisdom grant that they take on the idealism of Christian democracy instead of the atheism of one of the Marxist parties.

I have talked to you so much about Latin America because it has been my observation over many years that the Iowa farmers have always been more willing to learn about foreign affairs than farmers elsewhere. They have been willing to probe into the fundamental causes of war and peace, into the economic causes of wide-spread hunger, into the possibility that wide-spread chaos among hungry people would not only precipitate world-wide depression as in 1929 but also World War as in 1939.

Of course from the standpoint of the whole world, hungry people in India will be just as important as hungry people in Latin America. But I have centered more on Latin America because these countries are so close to us and because I know more about them at first hand.

I hope Iowa State University with its ideas about using urea and molasses will point the way to more efficient beef production. I am sure Iowa can produce quality beef as cheaply as anyone; I am convinced that the beef cycle is in the process of righting itself.

Saying this, I also believe that the really long time significant factors influencing our peace and prosperity will be in the hands of those of our neighbors who are hungry and desperate. If we act in a wise Christian spirit, keeping the second commandment as stated by Jesus, we shall be safe.

ESCUELA AGRICOLA PANAMERICANA

Antigua, Guatemala, 29 August 1965

APARTADO 93

TEGUCIGALPA, HONDURAS
CENTRO AMERICA

Dear Enrique:

Many thanks for your letter of the 24th, but I am really distressed to learn that your health is not improving. "Perhaps you will "snap out of it", as I did three years ago, and once again be able to come down here and push forward this corn work in the highlands. I most sincerely hope so.

I guess I didnt make myself too clear about helping the Indians on the steep hillsides. There are of course many such areas which should not be in corn, or much of anything else, but there is no doubt that we should devote our first attention to helping the men who are on potentially satisfactory farming land. But we must remember that in the highlands much of this is not flat. It may be on slopes as steep as 15 or 20 percent, dont you agree? If we should eliminate all land used by the Indians which has a slope less than 5% we wouldnt have much left.

I am not clear as yet, regarding just how unsatisfactory the corn passed out this year by Castillo is proving. I will be able to learn more by autumn, and after Milton gets back later - probably late Sept. Offhand, I think we might have done better at the start just to use selected corn of the kinds the Indians are already growing. I have seen some mighty good-looking ears in their dooryards this past season. If all the Indians could have corn as good as some that I have seen, I think all they would need to make them happy would be the fertilizer.

We could perhaps have accomplished more this year if we could have gone ahead with our program as originally envisioned. But you realize that to have done so would have been to hurt the government boys pretty badly. They wanted to take over the program and we had to let them do it. As a result, got into the bureaucracy treadmill and I am afraid not as much effort was put into it as we desired. And especially, not bringing in the Maryknoll boys. I will go up to Huehuetenango in the next month or so and see how we can be of help in the future.

I dont see that we should put any more money into the local program as yet. Castillo has used very little of the \$2000 we put in his hands. And I think Freytag, who as you say is food, has plenty at EAP to carry him for a year. But I am sure we can use some more money on some good project, and will look into this.

The transplanted strawberries are coming along well. I will tell Doc Chamberlain about your colored foto of his white strawberry and he will be delighted. I drop in him frequently, for he is a very intelligent hombre and if he had better health might do a lot of good work in the horticultural field.

With all good wishes, ever your devoted disciple

PROGRAMA DE DEMOSTRACIONES DE MAIZ PARA EL
ALTIPLANO DE GUATEMALA, PATROCINADO POR EL
SR. HENRY A. WALLACE.

ANTECEDENTES .- La mayor parte de la economía de los indígenas y su vida misma giran en derredor del maíz: como alimento, como fuente de trabajo, y como parte de su vida social y religiosa.

Conforme la presión demográfica ha venido aumentando en el altiplano de Guatemala, la superficie cultivada por persona ha sido menor, las tierras se han empobrecido y erosionado cada vez más.

Aún cuando la zona indígena es una fuente riquísima de -germoplasma de maíz, es posible introducir algunas variedades sintéticas que han demostrado mayores rendimientos y una amplia adaptabilidad, según las pruebas experimentales efectuadas por el Instituto Agropecuario Nacional, y que podrían incidir decisivamente en el aumento de los rendimientos.

Se reconoce la necesidad de diversificar la producción agrícola en las zonas indígenas hacia otros cultivos que, como el trigo, papas, fresas, frutales, hortalizas, etc., pueden proporcionar una fuente de ingreso mayor y reforzar su economía de intercambio. Pero, asimismo, se reconoce como condición para ello mejorar los rendimientos de maíz, a efecto de que puedan obtener el que necesitan para su subsistencia en una menor cantidad de tierra, pudiendo destinar el resto a otros cultivos comerciales como los antes mencionados.

OBJETIVOS.- Se establece un programa para el mejoramiento de la producción de maíz en las tierras altas de Guatemala, con el objeto de mejorar las condiciones económicas y nutricionales de la población indígena.

PATROCINIO.- El programa será patrocinado por el Sr. Henry A. Wallace, por decisión propia y en vista de su preocupación por los indígenas de Guatemala y de su interés por el maíz.

EJECUCION.- La ejecución de las demostraciones y cualquier otra etapa de mejoramiento que se contemple dentro del programa, será ejecutada por el Servicio de Fomento de la Economía Indígena, División del Instituto Agropecuario Nacional, en colaboración con los Padres Maryknoll, los Voluntarios del Grupo II del Cuerpo de Paz, y del Comité de Servicio de los Amigos.

SEMILLA.- La semilla inicial de las variedades sintéticas o de cualquier otra que sea necesaria, será proporcionada por la División de Investigaciones del Instituto Agropecuario Nacional. Posteriormente, cada agricultor guardará su propia semilla y venderá al SFEI el excedente de dicha semilla, proveniente de la cosecha anterior, para ser distribuida a otros agricultores.

DISTRIBUCION GEOGRAFICA.- El programa será desarrollado en la zona indígena, en el N. O. de Guatemala, en los municipios en que el SFEI y los Padres Maryknoll tienen localizados sus Centros de Acción, de acuerdo con el mapa adjunto.

PARCELAS DEMOSTRATIVAS.- Para iniciar el programa se establecerán el presente año 60 parcelas demostrativas de un máximo de 2 cuerdas de 25 varas cada una. De esa superficie, una cuarta parte será sembrada con maíz criollo de la variedad local, y el resto con maíz sintético No. 2 del cual hay 2 qq. de semilla disponible. Un supervisor general del proyecto se encargará de coordinar el programa, así como de tomar los datos necesarios y observar el comportamiento de las variedades en las diferentes regiones.

AYUDA TECNICA Y FINANCIERA.- Cualquier ayuda técnica y financiera que pueda conseguirse para el presente programa, será canalizada a través del SFEI.

INCENTIVOS.- Se establecen tres premios consistentes en

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para los tres agricultores que obtengan los mayores rendimientos, con la variedad sintética, en las parcelas demostrativas.

Guatemala, 3 de marzo de 1964

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LISTA DE LOS LUGARES DONDE SE PONDRAN
LAS PARCELAS DEMOSTRATIVAS:

ALTA VERAPAZ:

San Juan Chamelco
San Pedro Carchá
Tactic

CHIMALTENANGO:

Comalapa
Patzicía
Patzún
Balanyá
Tecpán
Poaquil

SOLOLA:

San Andrés Semetabaj
San Pedro La Laguna
San José Chacayá
Santa Lucía Utatlán

TOTONICAPAN:

Totonicapán

QUEZALTENANGO:

Concepción Chiquirichapa
Cabricán

SAN MARCOS:

Tejutla
San Miguel Ixtahuacán

HUEHUETENANGO:

Huehuetenango
Chiantla
San Juan Ixcoy
Santa Eulalia
San Pedro Soloma
San Mateo Ixtatán
Todos Santos Cuchumatán
Santiago Chimaltenango

QUICHE:

Chichicastenango
Nebaj
San Miguel Uspantán
Cunén